

# Ferris Graduate Survey Summary 2010-2016\*

An overview of student satisfaction data

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## Contents

Abstract	1
Introduction	2
Methods	2
Data collection . . . . .	2
Data provenance . . . . .	2
Results and Discussion	3
Response rate by year . . . . .	3
Response rate by degree earned . . . . .	5
Response rate by college . . . . .	7
Overall satisfaction ratings . . . . .	8
Preparation for employment . . . . .	8
Preparation for continuing education . . . . .	8
Good value for the money . . . . .	12
Recommendation of Ferris/KCAD . . . . .	12
Would choose FSU/KCAD again . . . . .	12
Would choose the same program again . . . . .	16

## Abstract

Assessment is not a spreadsheet; it's a conversation. — Irmeli Halinen

Student satisfaction data from the Ferris post-graduation surveys were compared from the 2010/2011 to 2015/2016 academic years. Over this timespan, the response rate has noticeably improved. The lowest return rate (17%) was obtained in 2010/2011 and the highest (27%) was collected in 2015/2016. The average number of responses was 829 per year for the time interval covered by this report. The distribution of students by credential and by college was roughly in line with the overall composition of the Ferris student body. Bachelor's and graduate degree students were somewhat over-represented and those in certificate programs were under-represented. Student satisfaction on most Likert scale items was fairly high and stable over time. The item with the poorest scores was "how often have you recommended Ferris/Kendall to others". At this time, it is unclear why there is an apparent disconnect between student satisfaction and recommendation.

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## Introduction

## Methods

### Data collection

All registration records for the fall of 2017 were collated and de-identified. The data file, ‘registrations.csv’, contains only the course name (e.g. BIOL 101), the core competency (e.g. Natural Sciences), and the standardized measure (e.g. Selected Response Exam). The datafile is available [here](#).

### Data provenance

Data provenance refers to a system that permits tracking of the origin, movement, modification, and utilization of data sets (Buneman et al., 2001). The provenance of General Education data will be explicitly declared to facilitate the reproducibility and extensibility of these studies.

### Location of public website files

All files related to this report can be found online at the Open Science Framework (Nosek, 2012). This site contains all of the files needed to reproduce this report from the de-identified data set. The site’s url is <https://osf.io/t6u8m/>.

### Session information

This report was written using RStudio (RStudio Team, 2015) and the R statistical programming language (R Core Team, 2013). These products are free to download for PC, Macintosh, and Linux operating systems. The following information pertains to the session parameters used to generate this report. If you have trouble reproducing this report, it may be due to different session parameters. You may contact Dr. Franklund if you need assistance.

R version 3.4.3 (2017-11-30)

**\*\*Platform:\*\*** x86\_64-apple-darwin15.6.0 (64-bit)

**locale:** en\_US.UTF-8|en\_US.UTF-8|en\_US.UTF-8|C|en\_US.UTF-8|en\_US.UTF-8

**attached base packages:** stats, graphics, grDevices, utils, datasets, methods and base

**other attached packages:** bindrcpp(v.0.2), pander(v.0.6.1), RColorBrewer(v.1.1-2), ggplot2(v.2.2.1), dplyr(v.0.7.4), plyr(v.1.8.4), tidyr(v.0.7.2) and readr(v.1.1.1)

**loaded via a namespace (and not attached):** Rcpp(v.0.12.15), rstudioapi(v.0.7), bindr(v.0.1), knitr(v.1.18), magrittr(v.1.5), hms(v.0.4.1), munsell(v.0.4.3), colorspace(v.1.3-2), R6(v.2.2.2), rlang(v.0.1.6), stringr(v.1.2.0), tools(v.3.4.3), grid(v.3.4.3), gtable(v.0.2.0), htmltools(v.0.3.6), lazyeval(v.0.2.1), assertthat(v.0.2.0), yaml(v.2.1.16), rprojroot(v.1.3-2), digest(v.0.6.14), tibble(v.1.4.2), bookdown(v.0.3.9), purrr(v.0.2.4), glue(v.1.2.0), evaluate(v.0.10.1), rmarkdown(v.1.8), stringi(v.1.1.6), compiler(v.3.4.3), pillar(v.1.1.0), scales(v.0.5.0), backports(v.1.1.2) and pkgconfig(v.2.0.1)

### Processing instructions

This project produced a computationally reproducible assessment report (this document). Anyone wishing to recreate this report from the source document will need to install the following on their computer:

1. An installation of the R programming language
2. An installation of the RStudio IDE
3. An installation of LaTeX

The necessary source files include the de-identified data set (BIOL200Data.csv), Rmarkdown code files (index.Rmd, 01-Introduction.Rmd, 02-Methods.Rmd, 03-Results.Rmd, 04-Discussion.Rmd, and 05-References.Rmd), bibtex reference file (references.bib), and custom art file in the /art folder.

To process the files, you must first open the project in RStudio. Click on the “Build Book” button in the Build menu. Bookdown allows you to build this project as `git_book` (html site), `pdf_book` (via LaTeX), or `epub_book` (compatible with iBooks and other e-book readers).

#### Citation of this work

All of the de-identified data, analysis code, and documentation that constitute this report project may be freely used, modified, and shared. The de-identified data set, BIOL200Data.csv, is released under the Creative Commons CC0 license. All documentation, including README.md, Codebook.md, and this report, are released under the Creative Commons CC-BY licence. Any questions, comments, or suggestions may be sent to Dr. Franklund.

## Results and Discussion

The response rates and their overall composition were compared for the six academic years under investigation. Responses to seven of the more quantitative questions (numbers 1, 2, 3, 4, 21, 22, and 23) were also examined. In general, student satisfaction is fairly constant or slightly improving. A more complete examination of each comparison is provided below.

#### Response rate by year

Student response rates for the graduation survey have generally been sufficient over the past six years to allow generalizations to be drawn for the entire population of Ferris graduates. Figure 1 shows the total number of alumni responses collected each academic year. The fewest responses, 524, were collected in 2010/2011 (17% response rate). There has been a steady improvement in response rate since that time. The overall average response rate was 829 per year for the interval investigated (approximately a 25% overall return rate).

Is a response rate of under 30% adequate? What should our target response rate be for this instrument? What can be done differently to increase our response rate further?

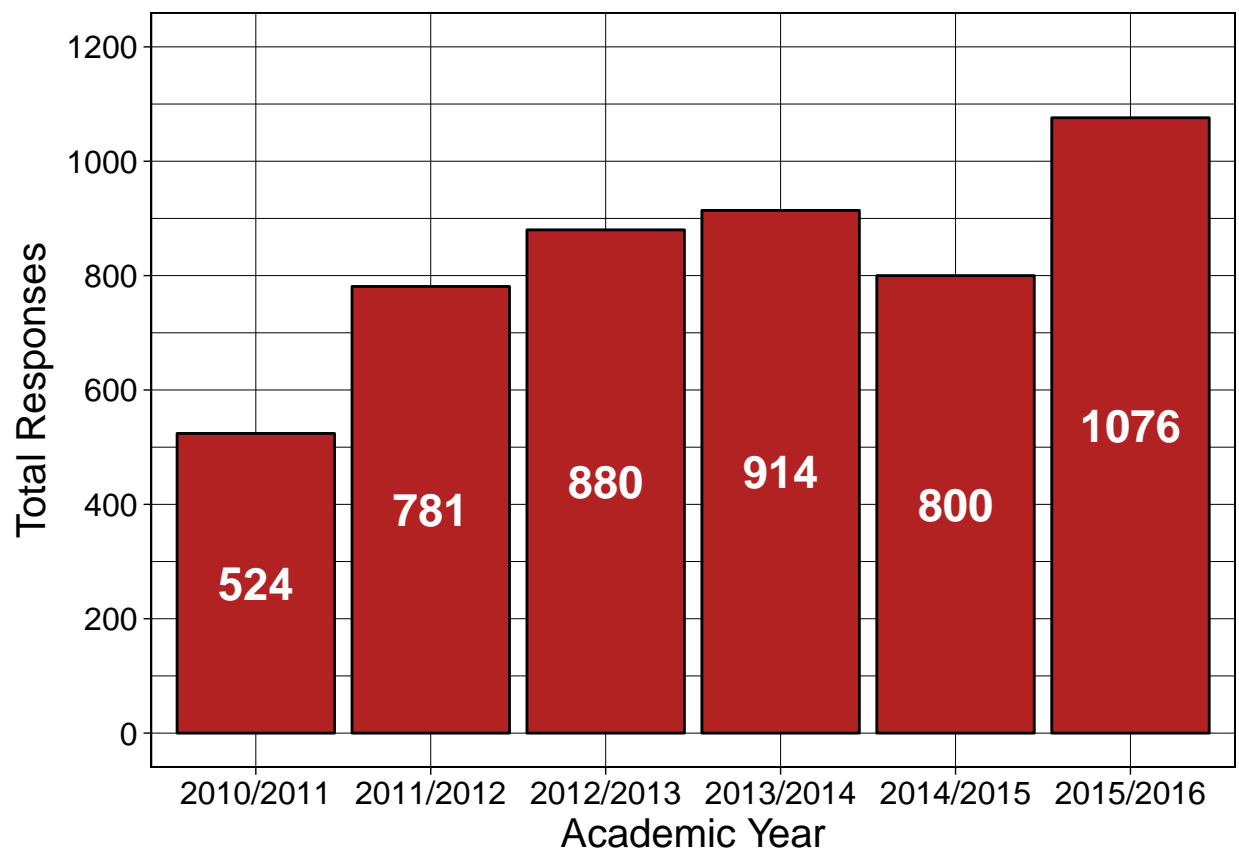
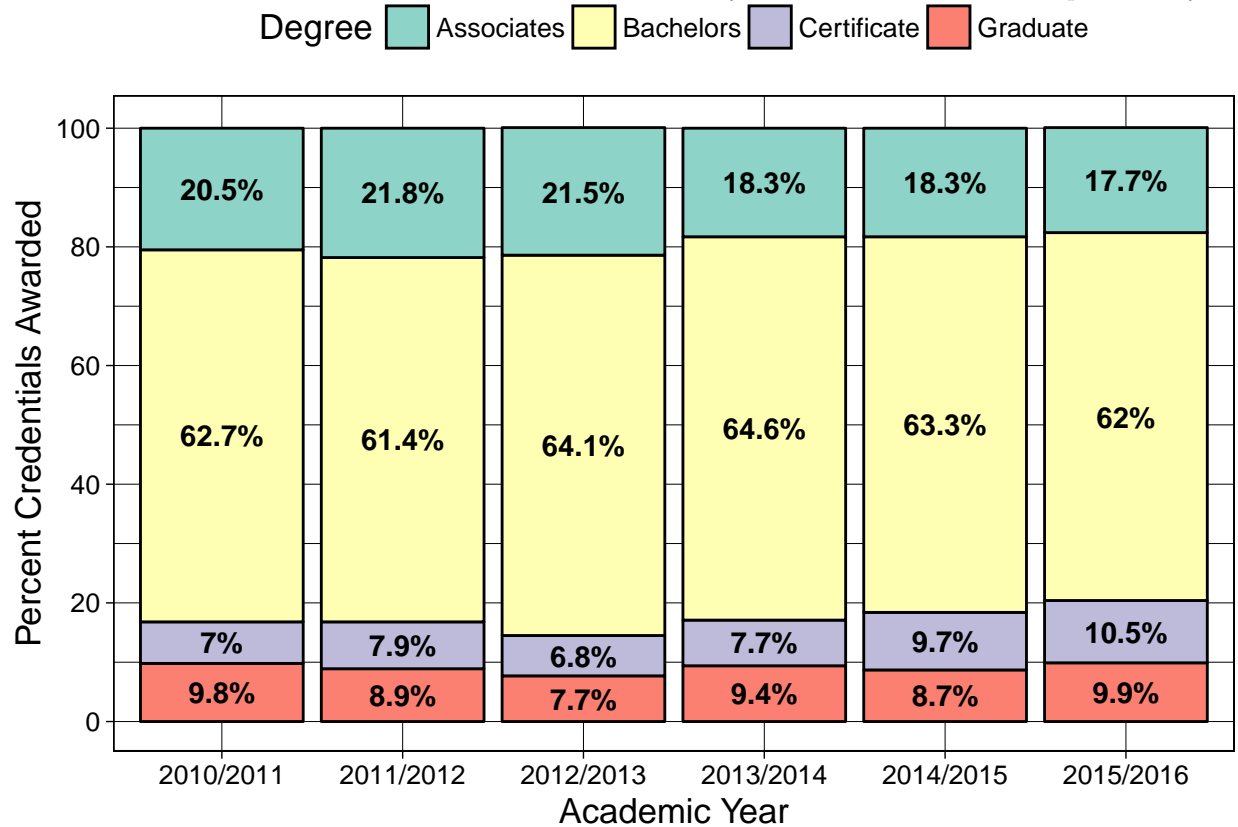


Figure 1: Total number of student survey responses per academic year

## Response rate by degree earned

Here is the actual distribution of credentials awarded by Ferris for each of the past six years.



Here is the response rate by degree.

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

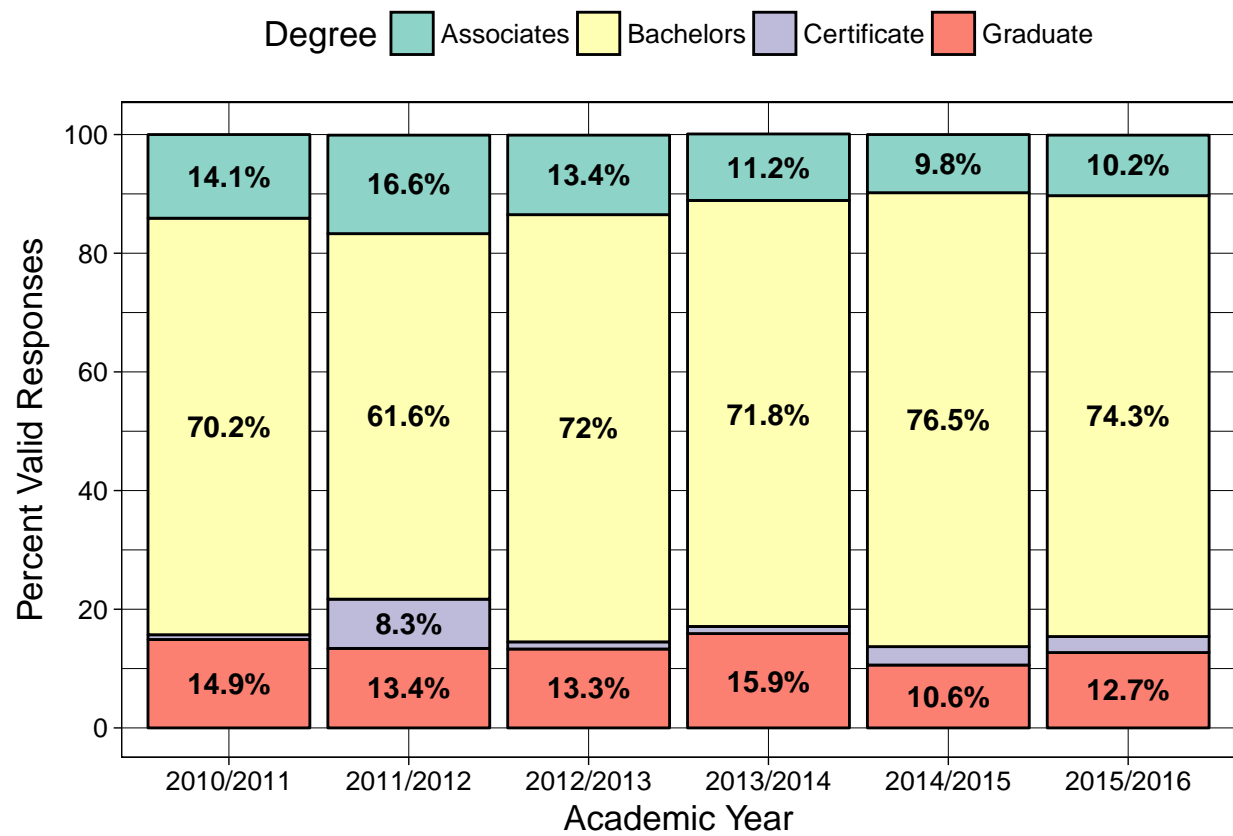
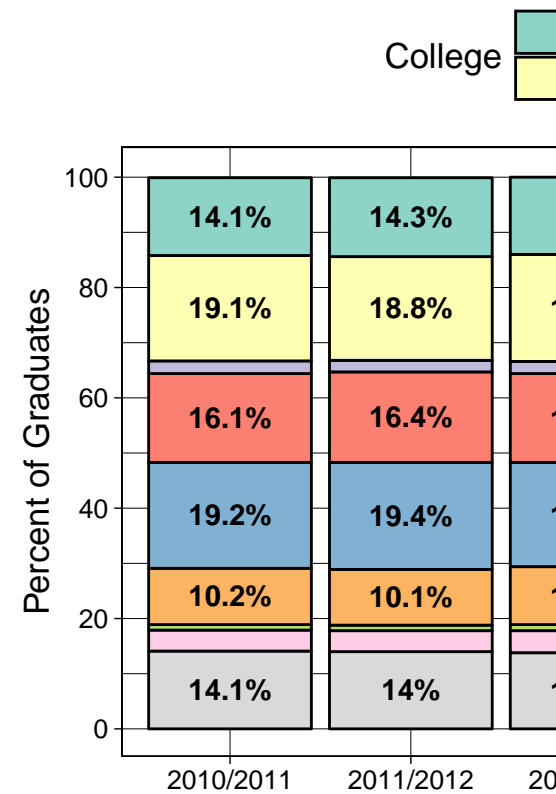
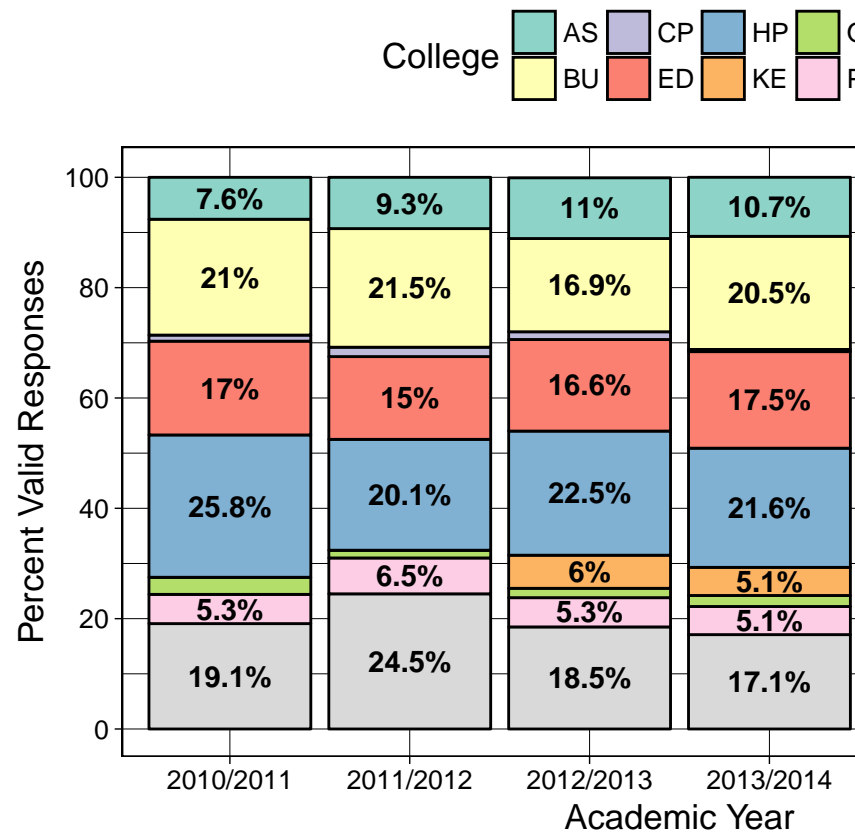


Figure 2: Percent of student survey responses by degree earned per academic year

## Response rate by college



Here is the distribution of graduates by academic college for the past six years.



And here is the distribution of responses by college.

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Overall satisfaction ratings

The overall satisfaction was 90.6%.

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Preparation for employment

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Preparation for continuing education

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?



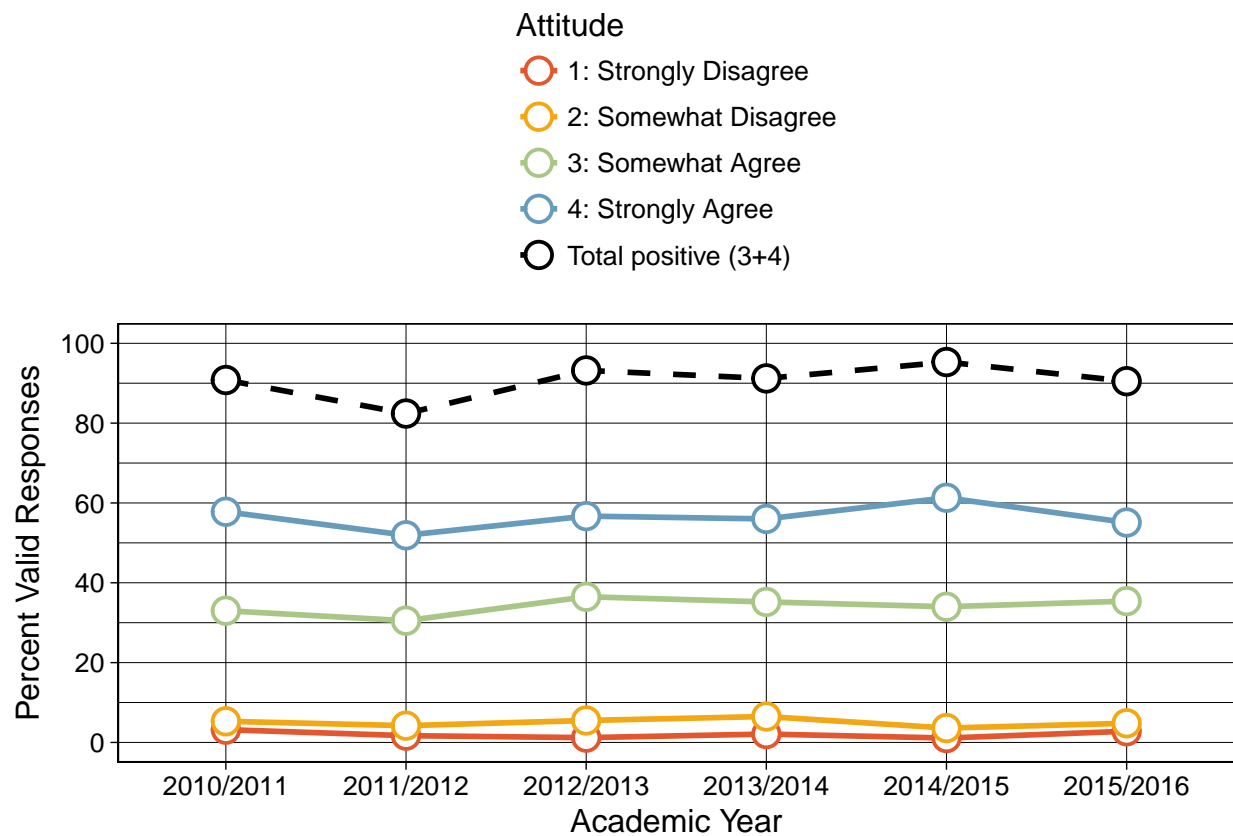


Figure 3: I am satisfied with the quality of education that I received at FSU/KCAD.

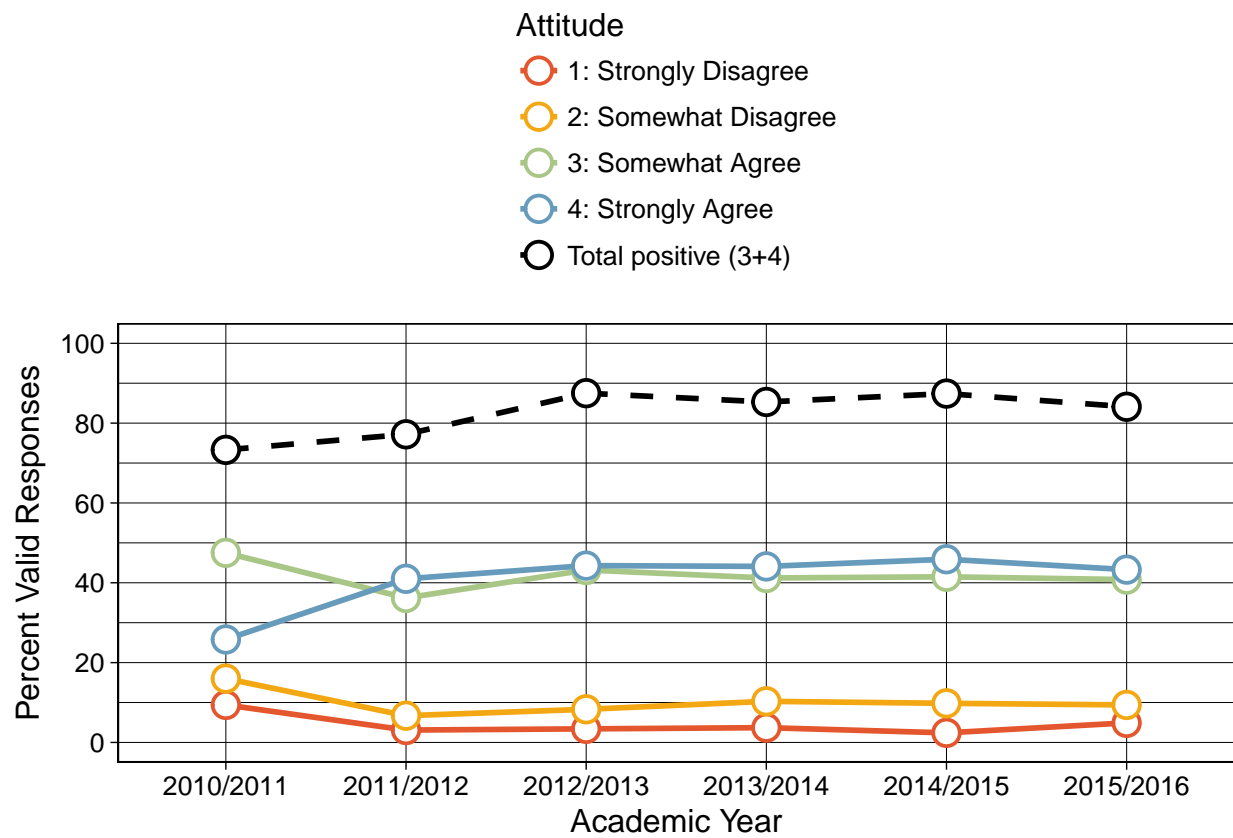


Figure 4: FSU/KCAD prepared me well for employment.

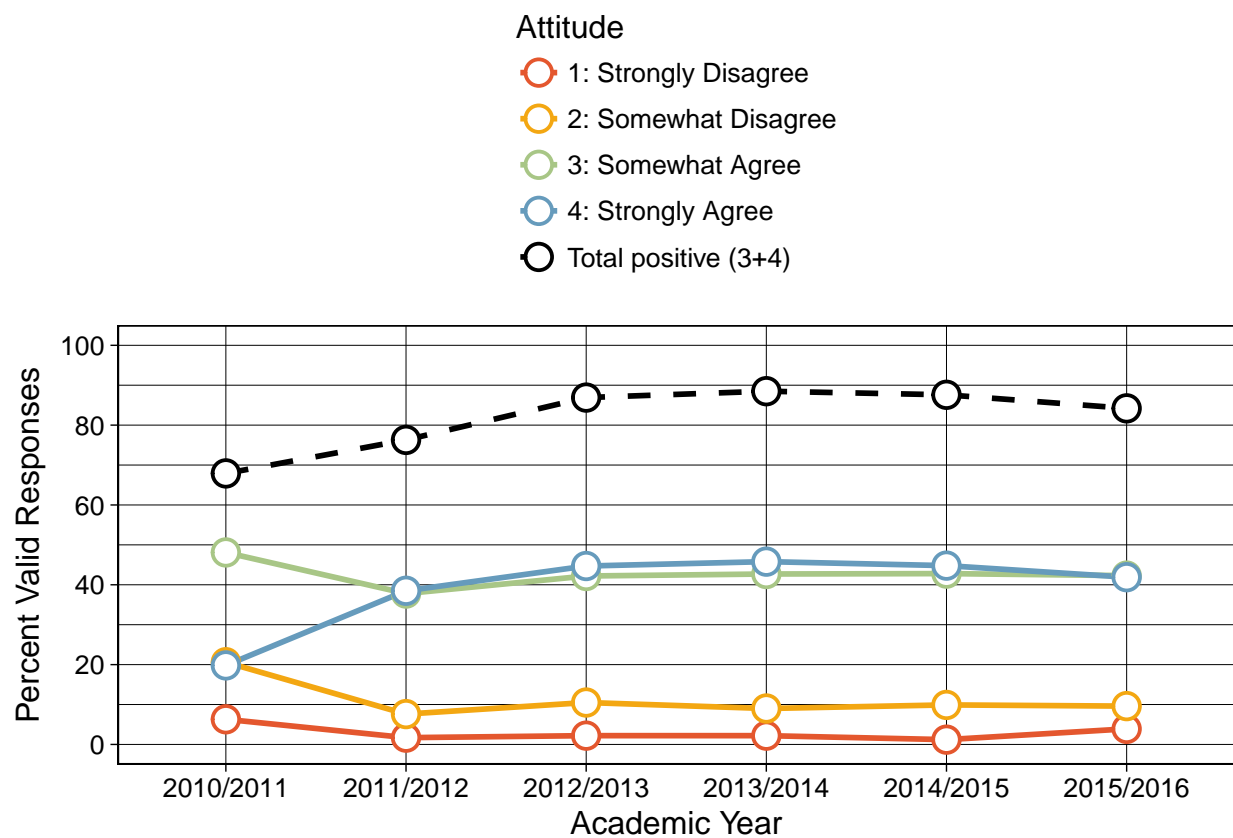


Figure 5: FSU/KCAD prepared me well for continuing my education.

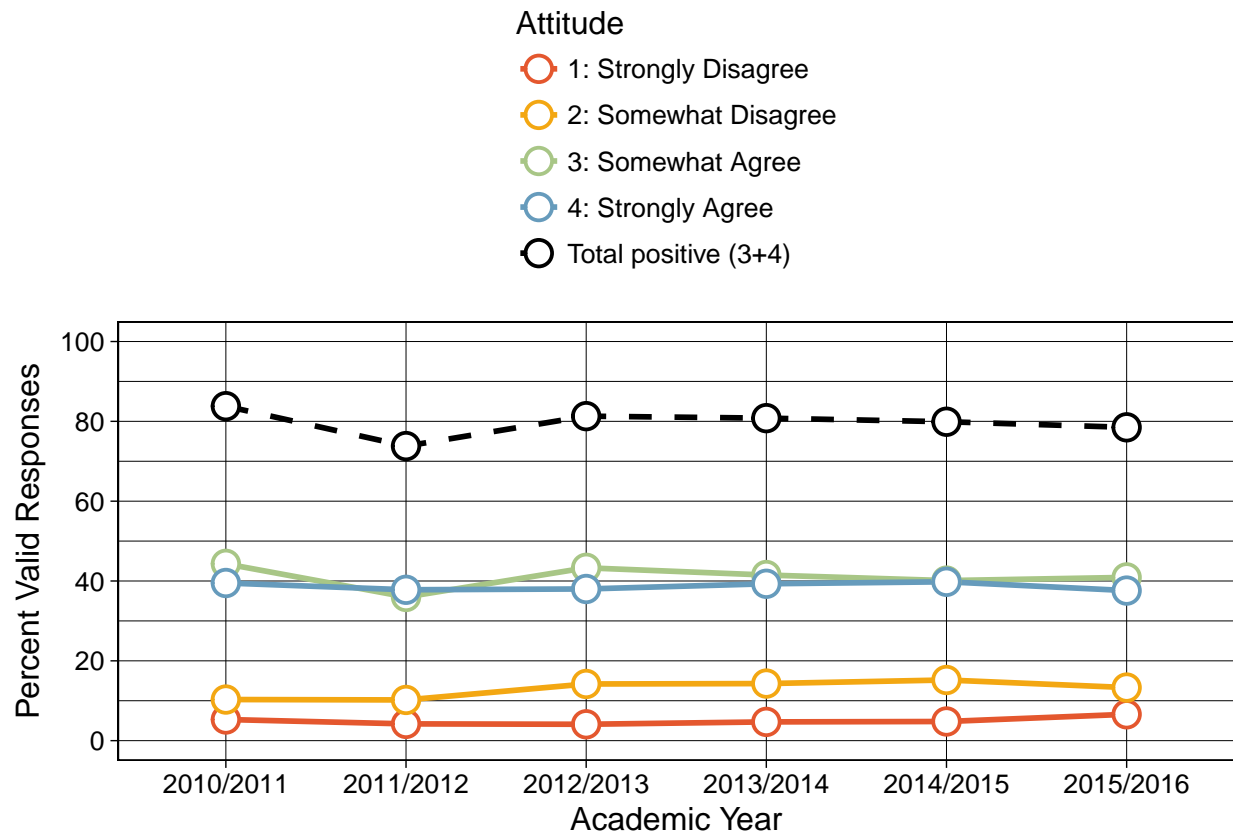


Figure 6: FSU/KCAD was a good value for my money.

Good value for the money

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

Recommendation of Ferris/KCAD

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

Would choose FSU/KCAD again

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

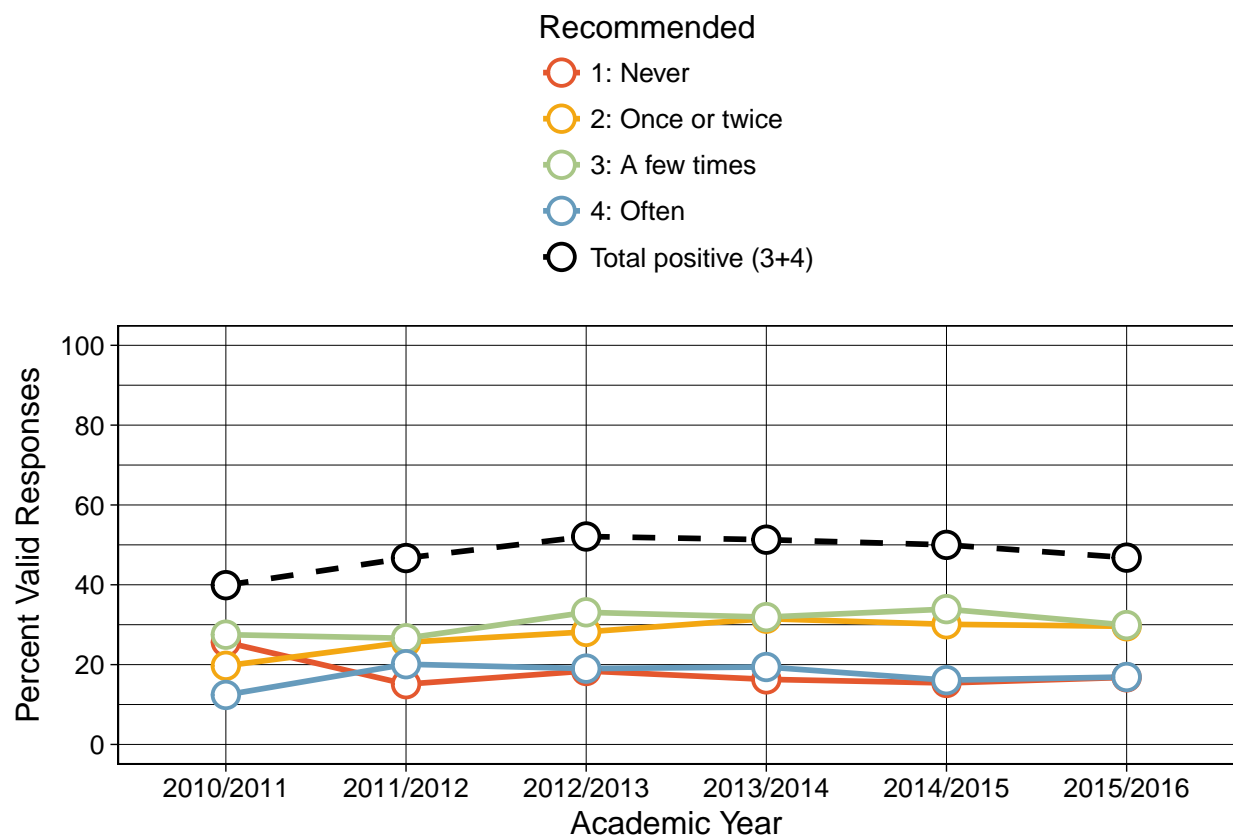


Figure 7: Since graduating, how often have you recommended FSU/KCAD to prospective students?

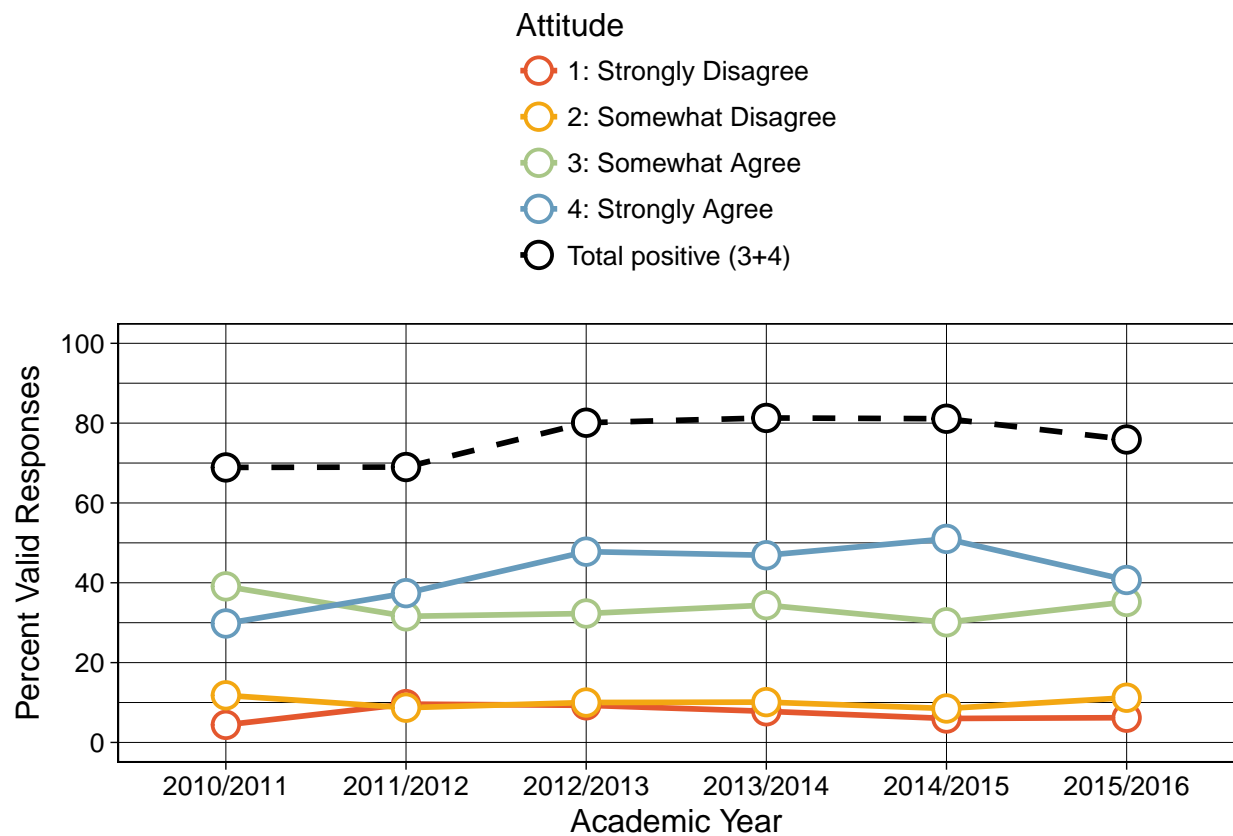


Figure 8: If I had the opportunity to start college over, I would still choose to attend FSU/KCAD.

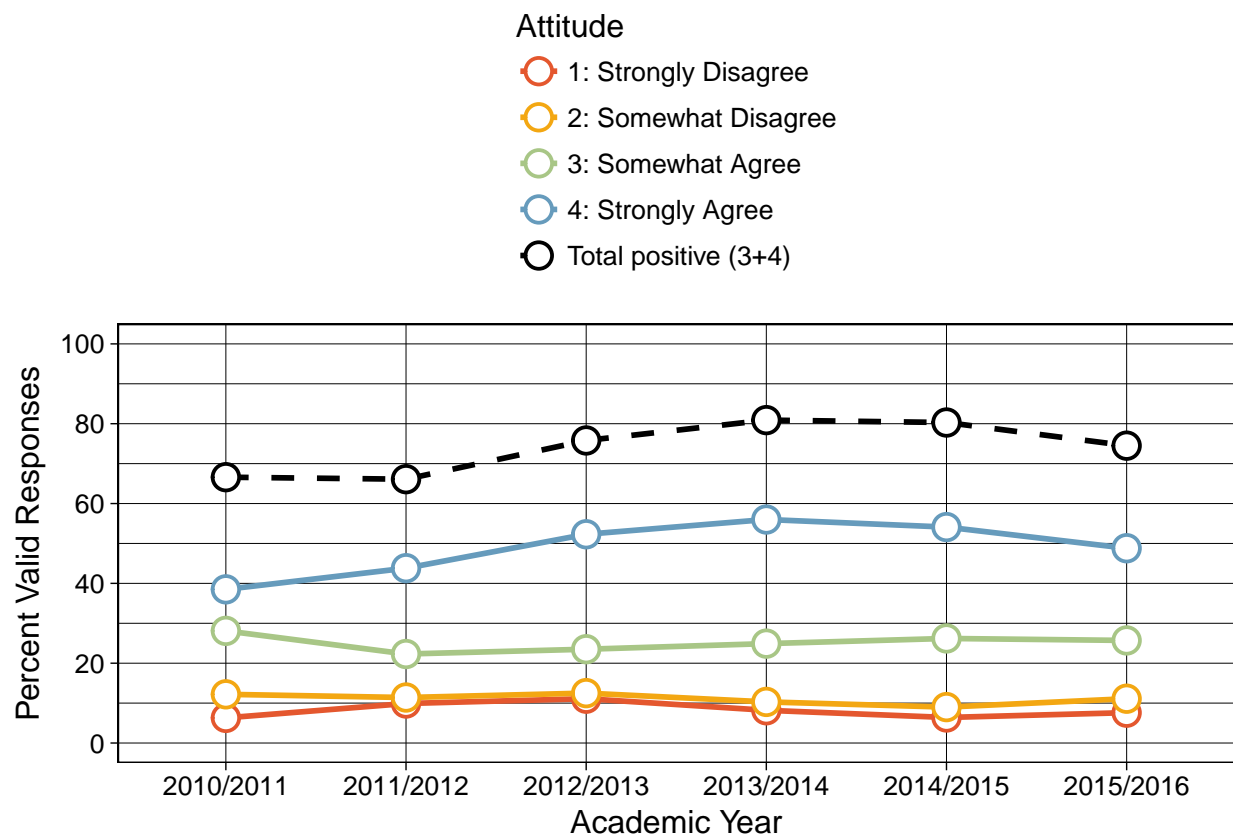


Figure 9: If I had the opportunity to start college over, I would still choose the same program of study.

Would choose the same program again

Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## References

- Buneman, P., Khanna, S., and Wang-Chiew, T. (2001). Why and Where: A Characterization of Data Provenance, pages 316–330. Springer Berlin Heidelberg, Berlin, Heidelberg.
- Nosek, B. (2012). An Open, Large-Scale, Collaborative Effort to Estimate the Reproducibility of Psychological Science. *Perspect. Psychol. Sci.*, 7(6):657–660.
- R Core Team (2013). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria.
- RStudio Team (2015). RStudio: Integrated Development Environment for R. RStudio, Inc., Boston, MA.